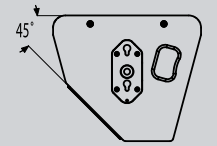
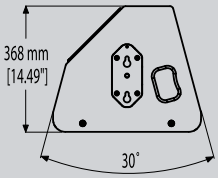
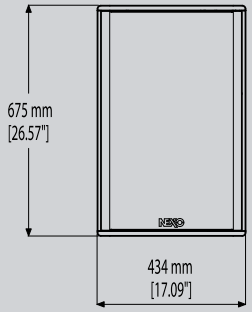
Data Sheet

PS15-R2 Loudspeaker







Key Features

- High-power system (136dB Peak SPL @ 1m) with 15in LF and 2in HF drivers.
- Rotatable asymmetrical horn and unique cabinet architecture ensure versatility; user-adaptable for both PA and stage monitoring applications.
- Two-way, switchable passive or active design for precise performance-matching to user requirements.
- Sophisticated control electronics ensure reliable, linear operation.
- Supported with a full range of mounting and flying accessories.

System Applications

- High-power mid-sized touring, installed PA for clubs, A/V, theater, Houses of Worship, broadcast, etc.
- High-quality, extremely powerful stage monitoring for A/V, theatre, cabarets, broadcast, etc.
- Fill-in system for any PA requiring side, down and near-field augmentation.

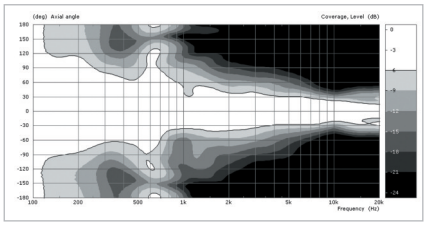
www.nexo.fr

A high power system capable of producing 136dB Peak SPL, the new PS15-R2 Loudspeaker can be safely driven with up to 2000 Watts of amplifier power. Controlled by the new, dedicated PS 15 TDController-R2, or the NXAMP Powered Controller, the PS15-R2 achieves high SPLs and wide bandwidth performance, despite being only half the weight and volume of common trapezoidal loudspeaker systems.

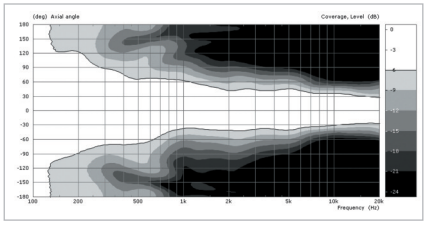
Along with the flexible coverage patterns enabled by NEXO's proprietary constant directivity asymmetrical dispersion horn, the architecture and weight balance of the PS15-R2 are designed to provide both uncompromised PA and stage monitor performance from a single speaker.

Left and Right versions of the PS15-R2 have been developed to provide a true stereo image – particularly important for wedge applications.

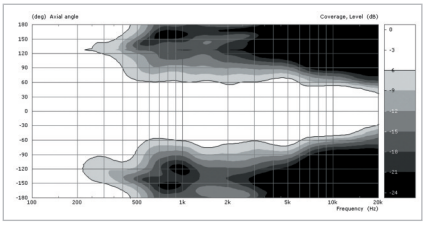
The 2-way passive 8Ω design uses a single amplifier channel to deliver bi-amped performance, reducing system cost, size and complexity, while the new cabinet design incorporates a pole mount and a new hardware adapter compatible with a vast array of touring and fixed installation accessories.



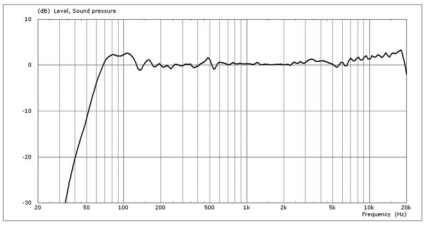
PS15-R2 horizontal coverage, +25°



PS15-R2 horizontal coverage, 0°



PS15-R2 horizontal coverage, -25°



PS15-R2 response

Specifications

PS15-R2 Loudspeaker

NEXO is one of the world's leading sound reinforcement loudspeaker manufacturers. Founded in 1979, the company is dedicated to crafting practical solutions with solid engineering. Each new design begins with a proprietary sophisticated computer simulation process that allows every parameter to be extensively modeled and simulated, leading to breakthrough cost and performance gains. NEXO's comprehensive product line includes loudspeakers, analogue and digital control electronics and amplification; all designed to deliver consistent sound quality and long term reliability for a broad range of applications.

NEXO S.A.
Parc d'Activité
du Pré de la Dame Jeanne
B.P. 5
60128 PLAILLY
Tel: +33 (0) 3 44 99 00 70
Fax: +33 (0) 3 44 99 00 30
e-mail: info@nexo.fr

NEXO LatAM
C.C. No 33. Suc 49
Caballito (1449)
Buenos Aires
Argentina
Tel: +54 114 432 1911
Fax: +54 114 431 1007
e-mail: info@nexo.fr

NEXO Asia
GPO Box 806
Hong Kong
SAR China
Tel: +852 9096 3472
Fax: +852 2104 3214
e-mail: info@nexo.fr

www.nexo.fr

PS15-R2 LOUDSPEAKER PRODUCT FEATURES

Components	LF 1 x 15" (38 cm) long excursion Neodymium 8Ω driver. HF 1 x 2" throat, 3" Titanium diaphragm compression driver + Low Distortion, Constant Directivity Asymmetrical Dispersion Horn.
Height x Width x Depth	675 x 434 x 368 mm (26.57" x 17.08" x 14.48").
Weight	28 kg (62 lbs).
Speakon Connectors	2x4 pole in & loop thru (switch passive to active inside).
Construction	Baltic Birch Ply finished with textured black coating.
Fittings	Handles 2 metal recessed pockets.
Front Finish	Moulded dark grey metal grille.
Flying Points	Two plate connecting with external accessories.
Stand fittings	Built in steel stand fitting (35mm / 1 3/8").

SYSTEM SPECIFICATIONS PS15-R2 with PS15 TDController-R2

Frequency Response [a]	50 Hz - 18 kHz ±3 dB.
Usable Range @-6dB [a]	47 Hz - 18 kHz.
Sensitivity 1W @ 1m [b]	102 dB SPL Nominal / 99 dB SPL Wideband.
Nominal Peak SPL @ 1m [b]	133 to 136 dB Peak.
HF Dispersion [c]	50° to 100° Horizontal x 55° Vertical Rotatable Horn, 4 positions.
Directivity : Q & DI [c]	Q : 16 Nominal / DI : 12 dB Nominal (f > 1.5 kHz).
Crossover Frequencies	1.1 kHz Passive or Active (internally switchable).
Nominal Impedance	Passive 8Ω or Active LF 8Ω, HF 16Ω.
Recommended Amplifiers	Passive 1000 to 2000 W 8Ω. Active LF 1000 to 2000 W 8Ω / HF 250 to 500 W 16Ω. Important: Active mode only available on NXAMP.

SYSTEM OPERATIONS

Electronic Controller	The PS15TD Controller-R2 is precisely matched to the PS15-R2 & RS15 cabinets and includes protections. Using PS15-R2 & RS15 without a properly connected PS15 TDController-R2 will result in poor sound quality and can damage the components.
Dispersion configuration	After dismounting the front grille from its fixings, the HF Horn can be rotated in 4 positions for dispersion configuration.
Sub-bass	The PS15-R2 can be used without optional RS15 Sub-bass. Active two-way operation with RS15 is included in the PS15 TDController-R2. One RS15 matches 2 x PS15-R2, additional RS15 may be used for enhanced LF capability.
Speaker Cables	PS15R2 are wired 2-/2+ on Input Speakons in Passive Mode. PS1R25 are wired LF 1-/1+ & HF 2-/2° on Input Speakons in Active Mode. Please refer to RS15 User Manual for RS15 for RS15 connection.

SHIPPING & ORDERING SPECIFICATIONS

Packaging	PS15-R2 is packaged as a single product.
Shipping Weight & Volume	33 kg (72.6 lbs) / 0.2 cubic metres (7 cubic feet).
Accessories	A full selection of mounting Accessories is available, please contact your Nexo Agent for details.

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.
[a] Response curves & data : Anechoic Far Field for the PS15-R2 + PS15TDController-R2. Half-Space Anechoic radiation for the RS15R2 + PS15TDController-R2.
[b] Sensitivity & Peak SPL data : these will depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise. Nominal refers to Voice Decade (300 Hz - 3 kHz), Wideband to the specified ±3 dB range. Data are for speaker + processor + recommended amplifier combinations.
Peak SPL is at clipping of recommended amplifier. Measurements made with PS15-R2s in passive operation mode.
[c] Directivity curves & data : obtained by computer treatment on off axis response curves.
E&OE September 2009.

Architectural and Engineering Specifications

The 2-way loudspeaker system shall have one 15 inch shielded Neodymium 8Ω cone transducer and a 2 inch compression driver on a low distortion constant directivity asymmetrical dispersion horn. The system's horizontal coverage shall range from 50° to 100°, with vertical coverage of +25° and -30°. The user shall be able to rotate the horn in 4 directions as required by the application. The system shall have a Q of 16 and a Directivity Index that is 12 at frequencies above 1.5kHz. Nominal Sensitivity shall be 102dB (99dB wideband). When driven by a NEXO NXAMP 4x1, NXAMP 4x4 a PS15 TDController- R2 or by a NX242 properly connected to amplification capable of delivering 1000 to 2000 Watts into an 8Ω (nominal) load the system shall be capable of 133dB to 136dB peak SPL, with a frequency response of 50Hz to 18kHz ±3dB (47Hz to 18Hz -6dB). The system shall include an active or passive crossover with internal switching. Electrical connections shall be made via one of the two 4-pole NL4MP SPEAKON connectors.

The system shall have a tuned ported multi-angle enclosure constructed of 18ply Baltic birch, finished in either black or white textured coating and having exterior dimensions no greater than 675mm H x 434mm W x 368mm D (26.6in H x 17.1in W x 14.5in D): the system shall weigh 29.0kg (65.0lbs). Exterior hardware shall include 1 metal plate, 2 attachment points and 1-pole socket. Interior components shall be protected by a powder coated perforated steel grille. The system shall be the NEXO PS15 R2 with a PS15 TDController-R2, NXAMP 4x1, NXAMP 4x4 or NX242.

LIMITED WARRANTY

NEXO loudspeakers and electronics are covered against defects in workmanship or materials for a period of two (2) years from the original date of purchase. At the option of NEXO the defective item will be repaired/replaced with no charge for materials/labour. The item is to be adequately packaged and dispatched, pre-paid, to a NEXO authorised distributor/service centre. Unauthorised repair shall void the warranty. The NEXO warranty does not cover cosmetics or finish and does not apply to any items which in NEXO's opinion have failed due to used abuse, accidents, modifications or any type of misuse. All images and text herein are the property of NEXO SA, and deemed accurate, although specifications are subject to change without notice.